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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/992,054

11/14/2001

Aref Ben Ahmed Jallouli

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AUSTIN, TX 78701

EXAMINER
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SERGEANT, RABON A

ART UNIT	PAPER NUMBER
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1711

MAIL DATE	DELIVERY MODE
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05/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/992,054

Applicant(s)

JALLOULI ET AL.

Examiner

Rabon Sergeant

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 22-24, 28-40, 42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-24, 28-40, 42, and 43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 22-24, 28-40, 42, and 43 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

Component (a) of claim 22, the diiso(thio)cyanate polysulfide prepolymer, cannot exist at the lower end of the claimed molecular weight range. The total of only the two isocyanate groups and two sulfide groups substantially exceeds the minimum molecular weight endpoint. Accordingly, since the prepolymer cannot exist over the full scope of the claimed molecular weight range, the claims encompass inoperative embodiments

Furthermore, the first polysulfide prepolymer of claim 28 is similarly inoperative, because the lower end of the average molecular weight range cannot be obtained even when the values of x and y are 1 or less.

3. Claims 22-24, 28-40, 42, and 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As aforementioned within paragraph 2, claims 22 and 28 encompass embodiments which cannot exist; therefore, the position is taken that these embodiments fail to meet the written description requirement.

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4. Claims 22-24, 28-40, 42, and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Component (a) of claim 22 renders the claims indefinite, because the diiso(thio)cyanate polysulfide prepolymer cannot exist at the lower end of the claimed molecular weight range. The total of only the two isocyanate groups and two sulfide groups substantially exceeds the minimum molecular weight endpoint.

Furthermore, the first polysulfide prepolymer of claim 28 renders the claim indefinite and fails to further limit claim 22, because the lower end of the average molecular weight range cannot be obtained even when the values of x and y are 1 or less.

5. The examiner has considered applicants' response with respect to claim 28; however, the fact remains that the claim sets forth limitations that are considered to be essentially mutually exclusive. Despite applicants' remarks, consideration of the claim requires that limitations be disregarded. Aside from the obvious incongruity, it cannot be clearly determined which of the conflicting limitations takes precedence.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 22-24, 28-30, 33-35, 38, 40, and 42 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 01/36508.

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The reference discloses an optical polymerizate, suitable for the production of optical lens material having a refractive index that exceeds that claimed, wherein the polymerizate is produced from an isocyanate functional prepolymer and an aromatic primary diamine, wherein the reactants contain sulfur atoms. See abstract, pages 3-23, and claim 7. Furthermore, with respect to claim 28, there is no requirement that x or y not be zero; therefore, when x is zero, the resulting prepolymer would be satisfied by an oligomer of 2,2'-thiodiethanethiol. See claim 7.

8. Claims 22-24, 28-30, 33-35, 38, 40, 42, and 43 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 01/36507.

The reference discloses an optical polymerizate, suitable for the production of optical lens material having a refractive index that exceeds that claimed, wherein the polymerizate is produced from an isocyanate functional prepolymer and an aromatic primary diamine, wherein the reactants contain sulfur atoms. See abstract, pages 3-24, and claim 7. Furthermore, with respect to claim 28, there is no requirement that x or y not be zero; therefore, when x is zero, the resulting prepolymer would be satisfied by an oligomer of 2,2'-thiodiethanethiol. See claim 7.

9. Applicants' response, filed February 7, 2007, to the prior art rejections has been carefully considered; however, the response is insufficient to overcome the rejections. In accordance with the examiner's previous position, applicants' argued definition of prepolymer allows for the prepolymer to be an oligomer, and it is noted that claim 7 of the references specifically allows for oligomers of the specified thiols, and the position is taken that such oligomers would inherently encompass polysulfides that satisfy applicants' claims. Despite applicants' remarks, applicants have not conclusively established that the disclosed oligomers are not within or encompassed by the argued prepolymers. While applicants' remarks are drawn to those citations

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of the references that are drawn to the production of disulfide containing compounds, it is noted that the references are by no means limited to compounds containing such disulfide linkages.

For example, the references disclose at page 6 that polythiol reactants may contain sulfide linkages and polysulfide linkages, wherein the number of sulfur atoms may exceed two.

Accordingly, the position is taken that one would immediately envisage from the teachings of the references thiol reactants that satisfy applicants' claimed thiol reactants. The position is further taken that applicants' interpretation of the references is far more limited than the interpretation that would be ascribed to the references by the skilled artisan.

Any inquiry concerning this communication should be directed to R. Sargent at telephone number (571) 272-1079.

R. Sargent  
April 29, 2007

  
**RABON SERGENT**  
**PRIMARY EXAMINER**